

Title (en)

Wire electrical discharge machine with workpiece spindle

Title (de)

Drahterodiermaschine mit Werkstückspindel

Title (fr)

Machine d'électrosérosion à fil avec à décharge à broche de pièce

Publication

EP 2602044 A3 20141022 (EN)

Application

EP 12184180 A 20120913

Priority

JP 2011270199 A 20111209

Abstract (en)

[origin: EP2602044A2] A wire electrical discharge machine is provided with a rotating shaft (21) for rotating a workpiece (1). In wire electrical discharge machining according to a machining program, a current average rotation radius at a current workpiece machining point (8a, 8b) is calculated for each predetermined period, based on average rotation radii at respective end points of a block to be executed and a directly preceding block and an amount of movement of the rotating shaft. Based on the calculated current average rotation radius, control is performed such that the speed of movement of the wire electrode (2) relative to the workpiece machining point (8a, 8b) agrees with a command speed acquired from a machining power supply.

IPC 8 full level

B23H 7/06 (2006.01); **B23H 7/20** (2006.01); **B23H 7/26** (2006.01); **G05B 19/416** (2006.01); **B23H 11/00** (2006.01)

CPC (source: EP US)

B23H 7/065 (2013.01 - EP US); **B23H 7/20** (2013.01 - EP US); **B23H 7/26** (2013.01 - EP US); **G05B 19/4163** (2013.01 - EP US);
B23H 11/003 (2013.01 - EP US); **G05B 2219/43137** (2013.01 - EP US); **G05B 2219/45043** (2013.01 - EP US);
G05B 2219/49082 (2013.01 - EP US)

Citation (search report)

- [YDA] US 4960971 A 19901002 - KAWANABE TASUKU [JP]
- [Y] EP 0530790 A2 19930310 - MITSUBISHI ELECTRIC CORP [JP]

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

EP 2602044 A2 20130612; EP 2602044 A3 20141022; EP 2602044 B1 20170607; CN 103157858 A 20130619; CN 103157858 B 20140702;
JP 2013121627 A 20130620; JP 5199447 B1 20130515; US 2013150999 A1 20130613; US 9446466 B2 20160920

DOCDB simple family (application)

EP 12184180 A 20120913; CN 201210530159 A 20121210; JP 2011270199 A 20111209; US 201213611524 A 20120912